

CAPITAL BUDGETING ANALYSIS IN DIGITAL MARKETING

ACTIVITIES AT YES CAKE & BAKERY

MUHAMMAD ATRAS MAFAZI

Department of Management, University of Indonesia, Salemba, Indonesia

ABSTRACT

The purpose of this paper is to construct the budgeting plan and investment feasibility analysis to get complete picture of investment and feasibility in digital marketing in SME. A series of structured interviews and brainstorming with the chairman and staff of Yes Bakery to prepare financial aspect in digital marketing strategy in Yes Bakery was conducted. The analysis was done in capital budgeting method such NPV, IRR, DPP, and PI with three scenarios: Optimistic, Moderate, and Pessimistic. It has been found that the consumer's behavior in seeking for information, in order to buying product is shifting to digitalization. To support the decision in running digital marketing activities, after making projected income and cash flow, also conducted an investment analysis to determine the feasibility of investing in digital marketing activities. Both scenarios of optimism and moderate provide an assessment that digital marketing investment is feasible to run. This is seen from NPV, IRR, and PI, which qualify for investment feasibility. The discounted payback period of the two scenarios also illustrates that the investment will reach its turning point before the estimated payback period.

The study was conducted in one Small Medium Enterprise (SME), and this paper is a direct application between the theories of capital budgeting with business practices, so that, it can become a reference of business owner before investing or developing new products.

KEYWORDS: Capital Budgeting, Investment Feasibility & Digital Marketing

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1. INTRODUCTION

The growth and development of information and internet technology is now encouraging changes in human behavior. Currently, electronic media is not only used as a means of communication, but also a means of business. In obtaining goods or services today, consumers not only get it directly but also through e-commerce, for example through the website or social media(Corcoran,2012). All digital transactions ranging from purchase, sale, ordering, advertising can be done through website or social media. This is based on the convenience obtained from the sellers and buyers, starting from the ease of access to products or services information, wider market opportunities, cost reduction for store rental, up to time efficiency (Kaplan, 2009). According to APJIII, the number of Internet users in 2016 reached 132 million, or about 51.6% of the total population in Indonesia, making e-commerce market has a good potential to be developed in Indonesia. (Sulastri, Wiryono, & Susanto, 2015)

SMEs are the most significant tools for economic development in the world, for example gross domestic product and workforce in Turkish economy impact really good (Karadag, 2015). Research on SMMEs lacks consensus on the precise definition of what a SMME is..(J. Servon, Lisa, Visser, M. Anne, Fairlie, 2011)

Small and Medium Enterprises (SME) in Indonesia gives significant roles to this country's economic development. Tambunan (2009) identifies five characteristics of SME in Indonesia. First, SME in Indonesia mainly owned by local people, and it absorbs millions of workforce in the country. Second, SME is very common in rural areas, and their business based on agriculture, thus they are become important for rural economic development. Third, SME is labor intensive, with many less educated and youngsters involved in the business. Fourth, SME in Indonesia obtain their financial operations from personal savings. Fifth, these businesses produce simple consumer goods. They serve domestic market and targeted on low income consumers (Anton, Muzakan, Muhammad, & Sidiq, 2015)

There are about 60 million new SMEs in Indonesia, but just only 10% who go digital. The Ministry of Cooperatives and SMEs together with the Ministry of Communications and Informatics committed to go online 8 million SMEs until 2020. This commitment shows the government's alignment in advancing SMEs as one of the backbone of the Indonesian economy. (Minister of Communication and Informatics of Indonesia, 2017)

The Era of the Asian Economic Community is a challenge for business actors in Indonesia. MSMEs are required to be ready for competition, to see wider marketing opportunities with the liberalization of trade. Therefore innovation, increased productivity, and competitiveness must be done. So, the quality of the products and services produced can compete with other products. (Industry, 2017)

The SMEDP also revealed that among the unique problems facing SMEs is the limited access to finance (URT, 2003). It might be possible that, if owners do not know how to make investment decisions and the link thereof between the financial goals and investment decisions (Katabi, 2016). As the first step, we have opted to envisage how much Serbian SMEs really in practice do apply business-planning models, e.g., at least budgeting techniques. (Ljitic, Marjanovic, & Djordjevic, 2014) Even if they are given sufficient capital, businesses may continue having problems. So, besides the problems of SMEs as highlighted above, there might be other problems including variability of the financial goal of investment decisions from shareholder wealth maximization to other goals when making investment decisions. (Katabi, 2016)

Gitman and Forrester research, based on survey of 268 U. S firms, found that the internal rate of return (IRR) was the most popular technique at that time. This finding was supported by similar survey conducted by Scott and Petty. Academician as we all know, prefer the Net Present Value (NPV) method for capital budgeting decisions. (Lazaridis, 2004)

Yes Bakery is a SME, engaged in culinary under the supervision of Central Management Unit of Small and Medium Business Development Center and Settlement (UPK PPUKMP) Pulo Gadung. Yes Bakery wants to expand its business using digital marketing because; now Yes Bakery is still using conventional system in marketing and selling products. Yes Bakery in selling its products rely solely on stores and motorcycle sellers. It is felt by Mrs. Linda, as the owner of Yes Bakery does not facilitate the consumer and also inefficient in the digital era today. In addition, the owners say, if SMEs do not innovate, not creative, and do not follow the development of the times, it is feared consumers will feel bored and move to other competitors because there is not continuous innovation.

Therefore, in running the digital marketing strategy, it takes sufficient funds to be invested. Currently, the budgeting system never exists in Yes Bakery all investments are made on the instinct of the owner. This is because; the owner captures all the tasks alone, so the owner never thinks structured in preparing the budget. Preparation of marketing

budgets made with digital marketing strategy is necessary for Yes Bakery, to know the total funds needed in making digital marketing investments and not over budget. Not just the preparation of the budget, in making new investments, Yes Bakery needs to determine whether an investment can generate returns and benefits that match the expectations of the owner. Thus, the costs invested are not wasted, because the strategy is not feasible to run.

Based on the obstacles faced by Yes Bakery and plans for the implementation of digital marketing strategy, it becomes the basis for the authors to succeed the strategy and to make the digital marketing budget as well as the investment analysis of digital marketing activities. Preparation of the budget will be done with several assumptions of conditions expected by Yes Bakery in business development, through digital marketing strategy.

2. CAPITAL BUDGETING & INVESTMENT APPRAISAL

Capital budgeting is the process of making planning decisions and analysis of opportunities for long-term investments in assets to produce benefits for more than one year. The decisions made during the process of development and evaluation of capital budgeting determine the future growth and productivity of the company, and it helps to achieve greatest profitability. (Rogerio, Vicente, Arturo, & Fabricia, 2015)

The following are the important objectives of capital budgeting:

- To ensure the selection of the possible profitable capital projects.
- To ensure the effective control of capital expenditure in order to achieve by forecasting the Long - term financial requirements.
- To make estimation of capital expenditure during the budget period and to see that the benefits and costs may be measured in terms of cash flow.
- Determining the required quantum takes place as per authorization and sanctions.
- To facilitate co-ordination of inter- departmental project funds among the competing capital projects.
- To ensure maximization of profit by allocating the available investible. (Jacobs, 2008)

Discounted cash flow methods are the improved methods over the traditional methods. These consider the time value of money. They consider the whole earnings of the proposal and the cost of the project. Because of these reasons, these methods are also called modern methods of investment appraisal. Discounted cash inflow methods can be classified into three types. They are,

- Net present value method
- Internal rate of return method
- Discounted Payback Period
- Profitability index method

2.1 Net Present Value

The method used in capital budgeting, which includes time value of money. Sums up the total cash flow during the project, whose value is converted to a present value based on a predetermined discount rate. Investment decisions are

accepted when $NPV > 0$ indicates investment will increase wealth, and rejected if $NPV < 0$ indicates unprofitable investment.

Net Present Value is commonly used, because it is easy to apply and takes into account time value of money, so the approximation will be close to the original.

2.2 Internal Rate of Return

The method used to know the interest rate or called the discount rate that the company obtained from investments made during the project period. IRR is obtained by trial and error. Calculates the rate of return of how the net present value will be zero.

How to decide, if IRR is greater than the expected capital value, then the investment decision is acceptable. On the contrary, if IRR is less than expected capital value, then investment is rejected.

2.3 Discounted Payback Period

This method is similar to the payback period that takes into account the amount of time needed to return the investment capital issued, the difference in the discounted payback period include time value of money elements, so that the net cash flow results obtained from the present value. Discounted payback period method is often used by SMEs, because the explanation is easy to understand. Decision made, if the DPP is smaller than the expected return of the investor.

2.4 Profitability Index

Profitability Index obtained by bathing between present value of net cash (proceed) with core outlays / investment. How to determine the decision of the criteria Profitability Index is, if Profitably Index greater than 1, then the investment decision is accepted. And, if the Profitability Index is less than 1, the investment decision is rejected.

Several surveys of capital budgeting practices reveal that the IRR is preferred over the NPV as an investment decision-making tool. Practitioner's preference for the IRR is explained by the fact that IRR is treated as a display method and is more cognitively efficient. Since the IRR is expressed as an interest rate, it more closely resembles an analog display, in which the IRR is simply compared to the required rate of return, whereas the NPV is expressed in dollars, resembling a precise digital display. (Hasan, 2013)

3. RESEARCH METHODOLOGY

The methods undertaken in Business Coaching activities are qualitative and quantitative methods. Qualitative methods obtained from direct interviews with owners and employees and direct observation to stores and factories. While the quantitative method is a supporter data, in order to produce a more appropriate problem solving. This method is using the data from the company and the financial statements. After the authors get data related Yes Bakery, the author further create an analysis of internal, external, and customer analysis to be a picture of the current condition of SMEs, which is connected with the implementation of digital marketing strategy that will run.

After conducting an analysis of MSMEs conditions, the author made GAP analysis and Pareto analysis to see the problems that become priority and can be solved by Yes Bakery. The author had a discussion with the Yes Bakery counterpart, Mrs. Linda, to determine the priority problem to solve. Judging from the Pareto analysis made, the priority

issue is the preparation of the budget made, in order to implement the digital marketing strategy. This is considered quite important because, previously Yes Bakery never made a budget and do not know what the costs required related to digital marketing.

After knowing the issues that are considered important, the author shared Yes Bakery to create the budget needed to implement the digital marketing strategy. The author makes a budget based on several alternative digital marketing strategy scenarios that will be due by Yes Bakery. After creating several scenarios of digital marketing strategy along with its budget, the author returns the decision to the Yes Bakery party related to the selected alternative scenarios. Furthermore, the decision will be forwarded to IT vendors, who will create and manage digital channel marketing from Yes Bakery. After business coaching process done, the result will answer the existing problem. The results will be achieved when the objectives of the business coaching activities are met.

There are several stages done by the author in doing Business Coaching, which the author makes a guide in solving the problem. Stages of the Business Coaching process are shown in conceptual framework below:

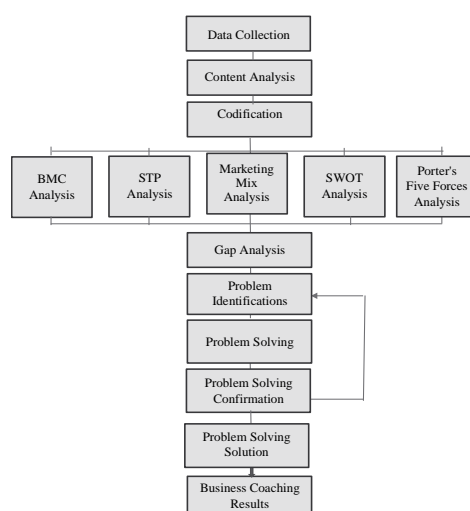


Figure 1

4. ANALYSIS

From the author's interview with Mrs. Linda, YES Cake & Bakery has not been able to determine whether to create a website or just make changes from existing websites. Thus, it cannot be ascertained by the company's capital certainty that they will spend on digital marketing activities. Writers with YES Cake & Bakery create cost budgets with some scenarios that can later become the basis before getting a decision from the IT vendor to be involved.

Based on the budgeting scenario that has been done, the following comparison of digital marketing investment costs are to be made at YES Cake & Bakery:

Table 4.1: Comparisons of Digital Marketing Investment Costs

No.	Scenario	Investment Cost	Annual Cost
1	Scenario 1 (e-commerce with vendor services)	Rp. 5.740.000	Rp. 5.040.000
2	Scenario 2 (e-commerce without vendor services)	Rp. 6.100.000	Rp. 780.000
3	Scenario 3 (non e-commerce)	Rp. 4.300.000	Rp. 780.000
4	Scenario 4 (changing)	Rp. 3.320.000	Rp. 780.000

From the cost calculations performed, YES Cake & Bakery decided to choose scenario 2, where it assumed YES Cake & Bakery to conduct digital marketing activities by creating an online store website without vendor service management. So, YES Cake & Bakery cost in the beginning of Rp 6.100.000 and then the website management is done independently.

In conducting an investment analysis on Yes Bakery's digital marketing activities, three scenarios will be prepared: optimistic, moderate, and pessimistic. There are several assumptions used in the preparation of YES Cake & Bakery's digital marketing capital budget. The assumptions used were obtained through interviews with YES Cake & Bakery, and used as the basis for preparing projections for the company. The owner is less willing to share the complete historical data, so that the assumption on the preparation of the sales target refers to historical sales from January 2017 to September 2017.

YES Cake & Bakery sales from January to September 2017 are Rp. 1.777.424.500, which means, its average sales of Rp. 197.491.611 per month. The author makes assumptions based on the average value to project sales until the end of 2017 YES Cake & Bakery amounting to Rp. 2,369,899,333. Sales assumption generated from digital marketing by 44% and conventional sales by 56%, owner optimistic digital marketing strategy implemented can contribute proportion sales big enough in the future. Increased sales are based on information from owners, who say that the increase per year is currently 5%. Here is an assumption of each scenario:

- **Optimistic**

Sales target in the first year, after applying digital marketing in this scenario increased by 12% of sales assumption in 2017. The assumption of sales increase in the next optimistic scenario per year is 5%.

- **Moderate**

Sales target in the first year, after applying digital marketing in this scenario increased by 11% from sales assumption in 2017. The assumption of sales increase in the next optimistic scenario per year is 5%.

- **Pessimistic**

Sales target in the first year, after applying digital marketing in this scenario rose by 10% of sales assumption in 2017. The assumption of sales increase in the next optimistic scenario per year is 5%.

Table 4.2: Sales Projection of YES Cake & Bakery Digital Marketing

Year	Pessimistic Total Sales	Moderate Total Sales	Optimistic Total Sales
1	104,275,571	114,703,128	125,130,685
2	109,489,349	120,438,284	131,387,219
3	114,963,817	126,460,198	137,956,580
4	120,712,007	132,783,208	144,854,409
5	126,747,608	139,422,369	152,097,129
6	133,084,988	146,393,487	159,701,986

The investment feasibility analysis will be done by calculating Net Present Value (NPV), Internal Rate of Return (IRR), Discounted Payback Period (DPP), Profitability Index (PI). Scenario analysis used is optimistic, moderate and pessimistic scenario. Each scenario generates different cash flows, but uses the same cost of capital according to the require rate of return. Below in table 4.3 is a calculation of cost of capital in digital marketing investment:

Table 4.3: Weighted Average Cost of Capital (WACC)

Description	Proportion	Amount	Rate	WACC
Equity	100%	Rp. 11.800.000	30%	30%
WACC				30%

Scenario analysis is also performed to illustrate some conditions. After analyzing the feasibility of investing digital marketing activities in all three scenarios, the following table 4.3 is a comparison of the three scenarios in each investment feasibility indicator:

Table 4.4: Comparison of Digital Marketing Investment Feasibility Analysis Results

	NPV	IRR	DPP	PI
Skenario Optimis	23,649,873	98,48%	1 tahun 4 bulan	2,60
Skenario Moderat	8.885.137	58,08%	2 tahun 5 bulan	1,60
Skenario Pesimis	-6.178.798	3,80%	Lebihdari 6 tahun	0,58

It can be seen in table 4.4; the three scenarios describe the different results. Scenarios that state that digital marketing investments are feasible to run are optimistic scenarios and moderate scenarios. This can be seen on the value of NPV, IRR and PI that meets the investment feasibility requirements. For the discounted payback period of the optimistic and moderate scenario also illustrates that the investment will reach its turning point before the estimated payback period.

While the pessimistic scenario states that digital marketing investment is not feasible. This can be seen on the value of NPV, IRR, PI that do not meet the requirements of investment feasibility. For the discounted payback period of the pessimistic scenario, it also illustrates that the investment will reach its turning point after the estimated payback period.

5. CONCLUSIONS

Based on business coaching activities conducted on this batch, the authors can draw conclusions that aims to answer the purpose of business coaching activities conducted on SMEs YES Cake & Bakery:

- To provide an overview for companies in implementing digital marketing activities, the author together with YES Cake & Bakery do cost budgeting with several scenarios because, YES Cake & Bakery initially do not have a budget preparation related to digital marketing activities that will run. Preparation of the budget starts from the selection of alternative investment costs website, the preparation of sales targets, profit and loss to cash flow. The future budget preparation is expected to provide an overview for YES Cake & Bakery in running its activities.
- To support the decision in running digital marketing activities, after making the projection of profit and loss and cash flow, then conducted also an investment analysis to determine the feasibility of investing in digital marketing activities that would be done. Both scenarios are optimistic, and moderate assessment that digital marketing investment is feasible to run. This can be seen on the value of NPV, IRR and PI that meets the investment feasibility requirements. The discounted payback period of the two scenarios also illustrates that the investment will reach its turning point before the estimated payback period. Meanwhile, the pessimistic scenario states that digital marketing investment is not feasible to run. NPV, IRR, PI values do not meet investment feasibility requirements. The discounted payback period of the pessimistic scenario also illustrates that the investment reaches a turning point of more than 6 years, which is the estimated time of return.

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